## Remarks

Reconsideration of the present patent application, as amended, is respectfully requested.

The drawings were objected to because the drawings fail to show the claimed "code devices". The claims have been amended to obviate this objection.

The specification was objected to for informalities. The applicant has amended the specification to overcome the objection; specifically, the applicant has updated the status of copending patent applications as requested by the Examiner. Additionally, the applicant has corrected a paragraph on page 11.

Claims 1-31 are pending in this application. Claims 2-6, 10, 19, 22, 24-25, and 27-31 were objected to for informalities. The claims were amended to overcome the objections, as the Examiner suggested. But in viewing the amendments, the applicant thinks that, rather than deleting the article, "the," in front of "at least one," perhaps the words, "at least," should be removed after "the," so that the claims would read, "the one..." to provide a better reading. If the Examiner agrees, the applicant will make such amendments.

Claims 1-10 and 24-31 were also rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant has amended claims 1-10 and 24-31 to change the term, "code devices," to "software code." And while the applicant understands the comment that computer codes need to be executed to perform the claim functions, the particular pertinence of the execution of computer code in view of the applicant's particular claim language is not understood. However, to accommodate the Examiner, the claims have accordingly been amended. With respect to the objection to claim 7, "the device" refers to the preamble of claim 1.

Claims 1-16 and 18-31 were rejected and claim 17 was objected to as being dependent upon a rejected base claim. Claims 1-4, 7-8, 11-14, 18-22, and 24-30 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,813,242, which issued November 2, 2004 to D. Haskin et al. in view of U.S. Publication No. 2002/0181490, filed December 5, 2002

by M. Frannhagen *et al.* Claims 9, 15-16, and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Haskin and Frannhagen references as applied to claims 1 and 11 above, and further in view of U.S. Patent No. 6,744,769, which issued June 1, 2004 to E.Y.B. Siu *et al.* 

In rejecting the applicant's independent claims, i.e., claims 1, 11, 19, 24 and 28, the Examiner stated:

For claims 1, 11-12, 19, 24 and 28, Haskin discloses determining the primary path using a routing algorithm, wherein the primary path includes a protectable segment (column 3, line 30-45 wherein a primary circuit path includes a protectable segment)

Creating the alternate path using the routing algorithm, wherein creating the alternate path includes creating the alternate path between the start node the end node such that the alternate path is arranged to protect at least the protectable segment (column 3, lines 61-to column 4, line 20 wherein a unidirectional alternate path is created and arranged to support the protectable segment)

The protectable segment is a path-protected segment and the alternate path is arranged to protect the path-protected segment (column 3, line 61 to column 4, line 20 wherein a undirectional alternate path is created and arranged to support the protectable segment)

For claims 1, 11-12, 19, 24 and 28, Haskin discloses the entire claimed invention except for wherein the protectable segment includes a first line-protected link

Frannhagen, from the same or similar field of endeavor, teaches 1+1 lineprotected link in an optical network (paragraphs 40 to 42, paragraphs 56-57 and Figure 4, element 401 and 402)

Thus it would have been obvious to someone of ordinary skill in the art to combine the line-protected oath [sic] mechanism of Frannhagen with the alternate path-rerouting method of Haskin. The line-protected path of Frannhagen is combined with the alternate path rerouting method by including the mechanism into the path-protected segment of the primary path. The motivation to combine the line-protected method with the alternate path method is that it provides an efficient end-to-end circuit path computation technique.

With due respect, the applicant respectfully disagrees. The Frannhagen patent as cited by the Examiner is nothing more than a statement that 1+1 protected links are found in optical networks. The applicant concedes this point and, indeed, described 1+1 protected links in the Background of the Invention. See, e.g., page 2, lines 1-23. As the applicant understands the Examiner's reasoning, the Examiner would simply insert a line-protected path, e.g., a 1 + 1 protection link because "it provides an efficient end-to-end circuit path computation technique." The applicant do not understand what is efficient, the technique to compute the circuit paths or

the resulting circuit paths? This ambiguity illustrates the conclusory nature of the last clause. Why would a person skilled in the art make the suggested combination?

But even if the combination of the Haskin and Frannhagen patents were made, the combination does not teach the applicant's claimed invention. To better distinguish his invention, the applicant has amended all the independent claims, i.e., claims 1, 11, 19, 24 and 28, so that it is clear that both the primary path and alternate path go "from a start node to a destination node." or words to similar effect.

In contrast, the alternative path in the Haskins patent has two segments, an initial segment and a second segment. "The essence of this invention is that an alternative opposite direction unidirectional label switched path AP is established between, for example, the last hop switch 5 and the destination switch in the following way. The alternative path dash lines originates at the last hop switch 5, and its initial segment runs internally of the primary protected path between the last hop switch 5 and the source switch 1, in the reverse direction (right-to-left arrow) of the protected path PP, traversing through every protected switch between the last hop switch and the source switch 1...The second and final segment of the alternative path AP is set between the source switch 1 and the destination switch 7 along an external transmission path that does not utilize any of the protected switches. 1, 3, 5 or 7...." Col. 3, line 61 to col. 4, line 23. In other words, the alternative path of the Haskin patent is from the last hop switch (or the destination switch) through the source switch and back to the destination switch. This does not meet the language of applicant's claims. Claim 1, for example, has the limitation, "an alternate circuit path from the first node to the second node."

Furthermore, independent claims 1 and 28 call for "a first protected link <u>selected</u> from the plurality of elements (applicant's underlining)...." Nowhere does the combination teach that a protected link should be selected.

Hence a *prima facie* case of obviousness has not been made and independent claims 1, 11, 19, 24 and 28 should be allowable. The cited references, either singly or in combination, do not render the applicant's claimed invention obvious.

Finally, claims 2-10, 12-18, 20-23, 25-27 and 29-31 should be allowable for at least being dependent upon allowable base claims. But at least some of the dependent claims are allowable in their own right. For example, claims 3, 13, 20, 25 and 30 have the limitation, the "alternate circuit path using-at least one protected link," or similar language. Both the primary path, including the protected path segment, and the alternate path of the Haskin patent are unidirectional, but in opposite directions. See the cited portion of the Haskin patent, beginning at col. 3, line 61, "The essence of this invention is that an alternative <u>opposite</u> direction unidirectional label switched path AP is established...(applicant's underlining)." According to the Examiner's rationale, the line-protected link of Frannhagen, e.g., a 1+1 protection link, is to be dropped into path protected segment of the primary path of Haskin. But the path-protected segment and the line-protected link is unidirectional from the source switch toward the destination switch. The line-protected link cannot be used in the opposite direction alternate circuit path, as called for in applicant's claims 3, 13, 20, 25 and 30.

In view of the amendments above and the remarks directed thereto, the applicant believes all claims now pending in this application are in condition for allowance. The applicant respectfully requests that the rejections be withdrawn, that be claims 1-31 be allowed and the case be passed to issue. If a telephone conference would expedite prosecution of this application in any way, the Examiner is asked to call the undersigned at (408) 868-4088.

Respectfully submitted,

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